

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 4-12 are presently active in this case, Claims 1-3 having been canceled and Claims 7-12 having been added by way of the present Amendment.

The Applicants respectfully traverse the Examiner's conclusion that Claims 4-6 do not read on the elected species. The elected species is "the conductive pattern all the way removed as in figure 1 with the shape of a rectangle as shown in figure 1." The election does not state that the rectangle need be an "isolated" part. Accordingly, the Applicants request reconsideration of the determination, and consider Claims 4-6 on their merits.

In the outstanding Official Action, the drawings and the specification were objected to for the reasons stated on pages 2-3 of the Official Action. The last paragraph on page 1 states that Figures 11 and 12 depict circuit board examples of the related art. Submitted concurrently herewith is a Letter Requesting Approval of Drawing Changes which includes amendments in red ink to Figures 11 and 12 that add the legend "Related Art" thereto in order to clarify that the subject matter shown therein is from the related art. Additionally, amendments have been made to Figures 2, 3, and 12 to correct any cross-hatching problems. Note, however, that the cross-hatching used in the figures is merely representative of preferred embodiments of the present invention, and are not meant to limit the scope of the claims in any manner. The second paragraph on page 14, as well as the last two lines on page 14, have been rewritten to clarify the intended meaning thereof. The specification has been amended on page 10 and Figure 1 has been amended to clarify which structure represents the margin and the inside of the conductive pattern. The Abstract of the Disclosure has been revised to concisely describe the claimed invention. Accordingly, the Applicants request the withdrawal of the objections to the drawings and the specification.

Claims 1-3 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The specific grounds for rejection are recited on pages 3 and 4 of the Official Action. Claims 1-3 have been canceled, thereby rendering the indefiniteness rejection moot. Accordingly, the Applicants request the withdrawal of the indefiniteness rejections of Claims 1-3.

Claims 1-2 were rejected under 35 U.S.C. 102(b) as being anticipated by Martin (U.S. Patent No. 3,908,185). Claims 1 and 3 were rejected under 35 U.S.C. 102(e) as being anticipated by Lebaschi (U.S. Patent No. 5,764,485). Claims 1-3 have been canceled, thereby rendering the anticipation rejections of Claims 1-3 moot. Therefore, the Applicants respectfully request the withdrawal of the anticipation rejections of Claims 1-3.

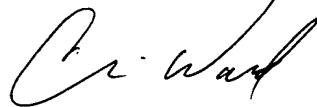
Newly added Claims 7-12 are considered allowable as they recite features of the invention that are neither disclosed, taught, nor suggested by the references of record. For example, independent Claim 7 recites a circuit board for mounting a part having a plurality of bumps by ultrasonic bonding. The circuit board includes a main body, and a conductive layer provided on the main body, where the conductive layer has a conductive pattern having at least one bonding area configured to correspond to the plurality of bumps of the part. The conductive layer has one of an isolated notch part and recess located proximate the at least one bonding area, wherein the notch part or the recess is configured to extend in a direction traverse to an ultrasonic vibrating direction of the ultrasonic bonding. Neither the Martin reference, nor the Lebaschi reference disclose a circuit board having the configuration recited in Claim 7. Specifically, the cited references do not discuss or disclose a circuit board including a notch part or recess configured to extend in a direction traverse to an ultrasonic vibrating direction of the ultrasonic bonding, thereby affecting the ultrasonic bonding conditions. See page 11, line 10, through page 12, line 10 of the present application. The

Martin reference describes wire bonding carried out on an individual basis, rather than using ultrasonic bonding to simultaneously bond a plurality of bumps to a conductive pattern. Additionally, the Lebaschi reference does not relate to ultrasonic bonding, and uses a plurality of solder-balls. Similarly, Claim 10 which recites a method of mounting a part having a bump on a circuit board by ultrasonic bonding, is not disclosed or suggested by the cited references for the reasons discussed for Claim 7. Furthermore, Claims 8-9 and 11-12 are considered allowable for the reasons advanced for Claims 7 and 10 from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed, taught, nor suggested by the applied references when those features are considered within the context of Claims 7 and 10.

Consequently, in view of the above discussion, it is respectfully submitted that Claims 4-12 are patentably distinguishing over the cited art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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